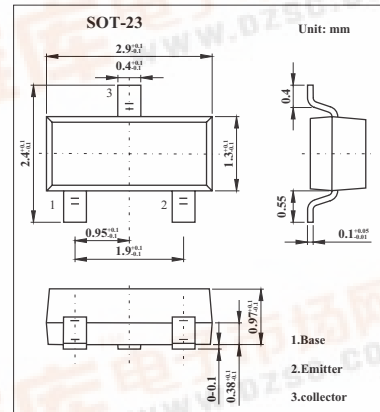


SMD Type Transistors

Small Signal Transistor
FM5089

Features

- Small signal transistor.



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	30	V
Collector-emitter voltage	V _{CEO}	25	V
Emitter-base voltage	V _{EBO}	4.5	V
Collector current	I _C	50	mA
Power dissipation	P _{tot}	330	mW
Operating and storage temperature range	T _j , T _{stg}	-55 to +150	°C

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =1mA, I _B =0	30			V
Collector-emitter breakdown voltage *	V _{(BR)CEO}	I _C =100mA, I _E =0*	25			V
Collector-base cut-off current	I _{CBO}	V _{CB} =15V, I _E =0			50	nA
Emitter-base current	I _{EBO}	V _{EB(off)} =4.5V, I _C =0			100	nA
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =10mA, I _B =1mA			0.8	V
DC current gain	h _{FE}	I _C =100μA, V _{CE} =5V	400		1200	
Current-gain-bandwidth product	f _T	I _C =500mA, V _{CE} =5V f=20MHz	50			MHz
Output capacitance	C _{obo}	V _{CB} =5V, f=1MHz, I _E =0			4	pF
Emitter-base capacitance	C _{ebo}	V _{BE} =0.5V, f=1MHz, I _C =0			10	pF
Noise figure	NF	I _C =200mA, V _{CE} =5V, R _g =10KΩ, f=10Hz to 15KHz			2	dB
Small signal current transfer ratio	h _{fe}	I _C =1mA, V _{CE} =5V f=1KHz	450		1800	

* Pulse test: t_p ≤ 300 μs; d ≤ 0.02.

Marking

Marking	1R
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